

IN THE UNITED STATES
PATENT AND TRADEMARK OFFICE

Patent Application

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Examiner	Duc T. Duong	Group Art Unit	2663
Title	End-To-End Prioritized Data Delivery on Networks Using IP Over Frame Relay		

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SIR:

AMENDMENT

In response to an Office action dated February 5, 2004 please amend the above-identified application as follows:

IN THE CLAIMS:

1. (Original) A method of transmitting data across a network comprising the steps of
receiving a plurality of Internet protocol packets each of which contains data and
priority information at a first router;
encapsulating the data contained in the Internet protocol packets into frame relay
frames containing the priority information;
transmitting the frame relay frames from the first router to a frame relay network
in a manner determined by the priority information included in the frame relay frames;
and
transmitting the frame relay frames across a frame relay network to a second
router in manner determined by the priority information included in the frame relay
frames.
2. (Currently Amended) The method of claim 1, wherein the step of transmitting the
frame relay frames from the first router comprises transmitting the frame relay frames
over a group of more than one permanent virtual circuit.
3. (Original) The method of claim 2, wherein each of the more than one permanent
virtual circuits is used to transmit frame relay frames having predetermined priority
information.
4. (Original) The method of claim 2, wherein each permanent virtual circuit is used to
transmit frame relay frames having predetermined priority information when a congestion
condition exists.
5. (Original) The method of claim 2, wherein the group of permanent virtual circuits
includes at least one circuit designated to carry frames containing critical information and
at least one circuit designated to carry frames containing non-critical information.
6. (Original) The method of claim 1, further including the steps of

converting the frame relay frames arriving at the second router into Internet protocol packets having the priority information; and

transmitting the Internet protocol packets from the second router toward a destination location in a manner determined by the priority information included in the Internet protocol packets.

7. (Original) The method of claim 1, wherein the step of transmitting the frame relay frames across a frame relay network to a second router comprises the steps of:

receiving the frame relay frames at a frame relay egress switch; and

transmitting the frame relay frames from the frame relay egress switch to the second router over more than one permanent virtual circuit.

8. (Original) The method of claim 7, wherein each of the more than one permanent virtual circuit is used to transmit frame relay frames having predetermined priority information.

9. (Original) The method of claim 7, wherein the frame relay frames are transmitted from the frame relay switch to the second router in a manner determined by priority information included in the headers of the frames.

10. (Original) The method of claim 1, wherein the priority information of each Internet protocol packet arriving at the first router is located in a header of each Internet protocol packet.

11. (Original) The method of claim 1, wherein the priority information of each Internet protocol packet arriving at the first router is a function of an address of each Internet protocol packet.

12. (Currently Amended) A computer network comprising:

a first network carrying IP packets that carry data and priority information;

a first router that receives said IP packets ~~containing data and priority information;~~

a frame relay network containing a frame relay ingress switch and a frame relay egress switch;

a first permanent virtual circuit coupled between the first router and the frame relay ~~egress~~ ingress switch that is used to carry frame relay frames having priority information corresponding to a first level of priority;

a second permanent virtual circuit coupled between the first router and the frame relay ~~egress~~ ingress switch that is used to carry frames having priority information corresponding to a second level of priority;

a second router;

a third permanent virtual circuit coupled between the frame relay egress switch and the second router that is used to carry frames having priority information corresponding to the first level of priority; ~~and~~

a fourth permanent virtual circuit coupled between the frame relay egress switch and the second router that is used to carry frames having priority information corresponding to the second level of priority; and

a second network coupled to said second router that carries IP packets that include data and priority information.

13. (New) The network of claim 12 where said first network or said second network, or both, are Ethernet networks.

14. (New) A method of transmitting data across a network comprising the steps of

a source transmitting Internet protocol packets, each of which contains data and priority information, over an IP network, to a first router;

receiving said packets at said first router;

encapsulating the data contained in said Internet protocol packets into frame relay frames containing the priority information;

transmitting the frame relay frames from the first router to a frame relay network in a manner determined by the priority information included in the frame relay frames;

transmitting the frame relay frames across a frame relay network to a second router in manner determined by the priority information included in the frame relay frames; and

transmitting from said second router IP packets containing data and priority information received from said frame relay frames, via an IP network, to a destination.